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     (FILE 'HOME' ENTERED AT 12:19:41 ON 23 NOV 2004)

     FILE 'MEDLINE' ENTERED AT 12:20:07 ON 23 NOV 2004
L1         5021 S C.ELEGANS
L2       202059 S PHENOTYP?
L3         9104 S  ELECTRONIC? (L) DATA?
L4            0 S L1 (L) L2 (L) L3
L5            0 S L1 (L) L3
L6            2 S L1 (L) ELECTRONIC?
L7          539 S L1 (L) L2
L8          303 S L7 AND DATA?
L9         1205 S L1 AND (PHENO? OR ELECTRONIC? OR COMPU?)
L10         275 S L9 AND (TEST? OR SCREEN?)
L11          54 S L10 AND (PHENOTYP? (L) (PROFILE OR CHARACTER?))
L12          20 S L11 AND PY<=1998
L13          20 SORT L12 PY
L14         846 S L1 AND (SCREEN? OR TEST?)
L15          64 S L14 AND (COMPOUND? OR CHEMICAL? OR SUBSTANCE?)
L16          10 S L15 AND L2
L17          10 SORT L16 PY

     FILE 'MEDLINE, AGRICOLA, CANCERLIT, SCISEARCH, CAPLUS, MEDICONF' ENTERED
     AT 12:29:44 ON 23 NOV 2004
               E BOGAERT THIERRY?/AU
               E KALLETA T?/AU
               E BOGAERT T?/AU
L18          23 S E2
L19          32 S E4
L20          55 S L18 OR L19
L21           6 S L20 AND L1 AND L2
L22           6 DUP REM L21 (0 DUPLICATES REMOVED)

=> d an ti so au ab pi l22 1-6

L22  ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2002:315204  CAPLUS
DN   136:336183
TI   Methods for identifying pesticidal compds. using gene sca-1 for
     sarco-endoplasmic reticulum Ca2+ ATPase cloned from C.
     elegans
SO   PCT Int. Appl., 205 pp.
     CODEN: PIXXD2
IN   Zwaal, Richard; Kaletta, Titus; Van den Craen, Marc; Logghe, Marc; Smits,
     Elke; Van Creikinge, Wim; Bogaert, Thierry
AB   The invention is concerned with methods for use in the identification of
     compds. having potential utility as pesticides.  In particular, the
     invention relates to methods for use in identifying compds. which affect
     the activity of a physiol. important calcium pump, the sarco/endoplasmic
     reticulum Ca2+ ATPase (SERCA).  In particular, gene sca-1 coding for
     sarco-endoplasmic reticulum Ca2+-transport ATPase (SERCA) in
     Caenorhabditis (C.) elegans (showing exon IV and V and
     surrounding introns plus promoter sequences) is cloned using primers
     designed according the conserved sequences of plant SERCA cDNA sequences.
     A lethal mutant C. elegans called ok190 is generated
     and rescue of sca-1 mutation by expression of a pest SERCA protein results
     in wild-type phenotypes of pharynx pumping, movement, egg
     laying, defecation, mating and etc.  And inhibition of C.
     elegans SERCA activity using thapsigargin or other chemical
     inhibitors of SERCA results in worms with recognisable phenotypic
     characteristics, including reduced growth, reduced rate of pharynx pumping
     and reduced nos. of progeny.  Based on these results pesticide screening
     methods are developed and disclosed using C. elegans
     or cultured mammalian cell systems.
     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     --------------      ----   --------    --------------------     --------
PI   WO 2002033405        A1     20020425    WO 2001-IB2391           20011015
        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MZ, NO, NZ, PH, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002018457	A5	20020429	AU 2002-18457	20011015

L22 ANSWER 2 OF 6 MEDLINE on STN
AN 2002413848 MEDLINE
TI unc-53 controls longitudinal migration in **C. elegans**.
SO Development (Cambridge, England), (2002 Jul) 129 (14) 3367-79.
Journal code: 8701744. ISSN: 0950-1991.
AU Stringham Eve; Pujol Nathalie; Vandekerckhove Joel; **Bogaert Thierry**
AB Cell migration and outgrowth are thought to be based on analogous mechanisms that require repeated cycles of process extension, reading and integration of multiple directional signals, followed by stabilisation in a preferred direction, and renewed extension. We have characterised a **C. elegans** gene, unc-53, that appears to act cell autonomously in the migration and outgrowth of muscles, axons and excretory canals. Abrogation of unc-53 function disrupts anteroposterior outgrowth in those cells that normally express the gene. Conversely, overexpression of unc-53 in bodywall muscles leads to exaggerated outgrowth. UNC-53 is a novel protein conserved in vertebrates that contains putative SH3- and actin-binding sites. unc-53 interacts genetically with sem-5 and we demonstrated a direct interaction in vitro between UNC-53 and the SH2-SH3 adaptor protein SEM-5/GRB2. Thus, unc-53 is involved in longitudinal navigation and might act by linking extracellular guidance cues to the intracellular cytoskeleton.

L22 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:137360 CAPLUS
DN 134:189001
TI Caenorhabditis elegans pkd2 gene, constructs and kidney disease drug screening methods
SO PCT Int. Appl., 103 pp.
CODEN: PIXXD2
IN Kaletta, Titus; Vangeel, Anton; **Bogaert, Thierry**; Van de Craen, Marc
AB The excretory system of Caenorhabditis elegans performs an osmotic regulatory function similar to that of vertebrate nephrons. As a first step in the development of nematode models for polycystic kidney disease (PKD), the inventors have isolated **C. elegans** pkd-2 gene, homologous to human PKD2 gene. The invention further provides assay methods for use in the identification of compds. which affect the activity of PKD2 and genetic suppressors of pkd-2, which methods are based on correction of an altered mating **phenotype** observed in male **C. elegans** which either overexpress the PDK2 protein or carry a deletion mutation in the pkd-2 gene.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001012796	A2	20010222	WO 2000-EP5102	20000602
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2351496	A1	20010103	GB 2000-13413	20000601
GB 2351496	B2	20010905		
HK 1030432	A1	20020208	HK 2001-100799	20010205

L22 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:756908 CAPLUS
DN 133:329555
TI Caenorhabditis elegans system for screening SERCA ATPase modulators
SO PCT Int. Appl., 112 pp.
CODEN: PIXXD2
IN Zwaal, Richard; Groenen, Jose; **Bogaert, Thierry**
AB The invention provides methods of screening for compds. which affect the activity of a physiol. important calcium pump, the sarco/endoplasmic reticulum Ca2+ ATPase (SERCA), using the nematode worm **C. elegans** .

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000063426	A2	20001026	WO 2000-IB558	20000414
WO 2000063426	A3	20010208		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2349217	A1	20001025	GB 2000-9363	20000414
CA 2369478	AA	20001026	CA 2000-2369478	20000414
GB 2359358	A1	20010822	GB 2001-11712	20000414
GB 2359358	B2	20020327		
GB 2359359	A1	20010822	GB 2001-11713	20000414
GB 2359359	B2	20020123		
GB 2359360	A1	20010822	GB 2001-11783	20000414
GB 2359360	B2	20020116		
GB 2359361	A1	20010822	GB 2001-11787	20000414
GB 2359361	B2	20020116		
GB 2359626	A1	20010829	GB 2001-11714	20000414
GB 2359626	B2	20020501		
GB 2359627	A1	20010829	GB 2001-11778	20000414
GB 2359627	B2	20020123		
EP 1171628	A2	20020116	EP 2000-919102	20000414
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002541859	T2	20021210	JP 2000-612503	20000414
US 6540996	B1	20030401	US 2000-549872	20000414
HK 1029376	A1	20010907	HK 2000-108142	20001216
US 2003149995	A1	20030807	US 2003-371101	20030221

L22 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:35000 CAPLUS
DN 132:103727
TI Characterization of gene function using double-stranded RNA inhibition
SO PCT Int. Appl., 97 pp.
CODEN: PIXXD2
IN Plaetinck, Geert; Platteeuw, Christ; Mortier, Katherine; **Bogaert, Thierry**
AB There is provided a method of identifying DNA responsible for conferring a particular **phenotype** in a cell which method comprises (a) constructing a cDNA or genomic library of the DNA of said cell in a suitable vector in an orientation relative to a promoter(s) capable of initiating transcription of said cDNA or DNA to double-stranded (ds) RNA upon binding of an appropriate transcription factor to said promoter(s), (b) introducing said library into one or more of said cells comprising said transcription factor, and (c) identifying and isolating a particular **phenotype** of said cell comprising said library and identifying the DNA or cDNA fragment from said library responsible for conferring said **phenotype**. Using this technique it is also possible to assign function to a known DNA sequence by (a) identifying a homolog(s) of said DNA sequence in a cell, (b) isolating the relevant DNA homolog(s) or a fragment thereof from said cell, (c) cloning said homolog or fragment thereof into an appropriate vector in an orientation relative to a suitable promoter(s) capable of initiating transcription of dsRNA from

said DNA homolog or fragment upon binding of an appropriate transcription factor to said promoter(s), and (d) introducing said vector into said cell from step (a) comprising said transcription factor. Thus, an ordered library for inhibitory dsRNA technol. can be prepared harboring every gene of the Caenorhabditis elegans genome; the resulting **phenotypes** can give a functional description to the gene or gene family or gene homologs of the **C. elegans** genome. Plasmid vectors are described incorporating phage T3, T7, and SP6 RNA polymerase genes and promoters for expression in **C. elegans**. Inhibitory dsRNA technol. can also be used to validate clones identified in yeast 2-hybrid vector expts.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000001846	A2	20000113	WO 1999-EP4718	19990702
	WO 2000001846	A3	20000615		
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	CA 2332619	AA	20000113	CA 1999-2332619	19990702
	AU 9949079	A1	20000124	AU 1999-49079	19990702
	AU 769223	B2	20040122		
	GB 2349885	A1	20001115	GB 2000-20485	19990702
	GB 2349885	B2	20030129		
	EP 1093526	A2	20010425	EP 1999-932836	19990702
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	GB 2362885	A1	20011205	GB 2001-18514	19990702
	GB 2362885	B2	20020731		
	BR 9911802	A	20020122	BR 1999-11802	19990702
	EP 1197567	A2	20020417	EP 2001-129274	19990702
	EP 1197567	A3	20030102		
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	GB 2370275	A1	20020626	GB 2002-6600	19990702
	GB 2370275	B2	20021127		
	JP 2002519072	T2	20020702	JP 2000-558236	19990702
	DE 29924298	U1	20021017	DE 1999-29924298	19990702
	DE 29924299	U1	20021017	DE 1999-29924299	19990702
	NZ 509182	A	20040130	NZ 1999-509182	19990702
	RU 2240349	C2	20041120	RU 2000-133315	19990702
	HK 1029142	A1	20030425	HK 2000-107819	20001206
	ZA 2000007653	A	20020919	ZA 2000-7653	20001219
	NO 2001000019	A	20010305	NO 2001-19	20010102
	US 2003061626	A1	20030327	US 2002-57108	20020125
	US 2004133943	A1	20040708	US 2003-738886	20031217
	US 2004187170	A1	20040923	US 2004-826522	20040416

L22 ANSWER 6 OF 6 MEDLINE on STN

AN 91347895 MEDLINE

TI Positioning and maintenance of embryonic body wall muscle attachments in **C. elegans** requires the mup-1 gene.

SO Development (Cambridge, England), (1991 Mar) 111 (3) 667-81. Journal code: 8701744. ISSN: 0950-1991.

AU Goh P Y; **Bogaert T**

AB As part of a general study of genes specifying a pattern of muscle attachments, we identified and genetically characterised mutants in the mup-1 gene. The body wall muscles of early stage mup-1 embryos have a wild-type myofilament pattern but may extend ectopic processes. Later in embryogenesis, some body wall muscles detach from the hypodermis. Genetic analysis suggests that mup-1 has both a maternal and a zygotic component and is not required for postembryonic muscle growth and attachment. mup-1 mutants are suppressed by mutations in several genes that encode extracellular matrix components. We propose that mup-1 may encode a cell

surface/extracellular matrix molecule required both for the positioning of body wall muscle attachments in early embryogenesis and the subsequent maintenance of these attachments to the hypodermis until after cuticle synthesis.

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